

REMARKS/ARGUMENTS

Pending claims 1 and 18 have been amended to overcome the informality, and claim 6 has been amended to overcome the §112 rejection.

Pending claims 1, 3, 9-15, 18-19, 21, 26-28 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 6,330,684 (Yamanaka). Applicant respectfully traverses the rejection. As to claim 1, Yamanaka nowhere teaches that two path metrics are evaluated in parallel responsive to a single vector add-subtract instruction and VITMAX instruction. In this regard, the Office Action refers to FIGS. 14 and 15 of Yamanaka and the corresponding portions of the Specification. However, it is noted that in Yamanaka, as exemplified by FIG. 15, multiple instructions are used; for example, instructions zero and one are issued to perform different ACS operations. Instead, as set forth in claim 1 a single vector add-subtract instruction operates on two prior path metrics and stored branch metrics, and a single VITMAX instruction compares values in two registers and stores the two larger values in a third register. In contrast, as described in Yamanaka, multiple instructions are issued, one in each cycle. While these instructions may execute in parallel as described in Yamanaka, these operations are not according to a single vector add-subtract instruction and a single VITMAX instruction. Nor do they perform the recited comparison of upper and lower values of two registers and storing the larger in a third register responsive to the single VITMAX instruction.

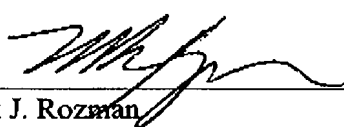
Nor is there any basis to somehow modify the teaching of Yamanaka to obtain the recited subject matter. In this regard, the mere teaching in Yamanaka that different constraint lengths and code rates can be used nowhere provides a suggestion to modify Yamanaka to obtain the recited subject matter. Accordingly, claim 1 and the claims depending therefrom are patentable over the cited art.

For at least similar reasons, the remaining independent claims and thus the claims depending therefrom are also patentable over the cited art. In this regard, the proposed combination of Yamanaka in view of secondary references, including Leisbon and U.S. Patent No. 5,970,104 (Zhong), further fails to teach the recited subject matter of performing the operations responsive to single vector instructions.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504.

Respectfully submitted,

Date: 10/8/07


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